Claims:

1. A method of determining a degree of deflection in a breast compression plate of a mammography apparatus, the mammography apparatus further including an optical measuring device, the method comprising:

(a) providing a pattern on the breast compression plate, the pattern being imagable by the optical measuring device, and having a plurality of local pattern indicia;

(b) adjusting the breast compression plate to a selected height;

(c) imaging the breast compression plate using the optical measuring device to provide an image of the pattern, the image having a plurality of local image indicia including an associated local image indicia for each local pattern indicia in the plurality of local pattern indicia; and

(d) for each local pattern indicia in the plurality of local pattern indicia, determining an associated local deflection of the breast compression plate from the associated local image indicia.

2. The method as defined in claim 1 wherein the breast support plate is adjustable, the method further comprising

moving the breast support plate to a plurality of different positions; and

for each position in the plurality of different positions, determining a position-specific image of the pattern, the position-specific image including an associated position-specific local image indicia for each local pattern indicia at each position in the plurality of positions;

wherein step (c) comprises, for each local pattern indicia in the plurality of local pattern indicia, determining the associated local deflection of the breast

support plate by correlating the associated degree of shift in the associated local image indicia with an associated position-specific local image indicia.

3. The method as defined in claim 1 wherein the pattern is a two-dimensional radio-lucent pattern.

4. The method as defined in claim 3 wherein the pattern is a grid, and each local pattern indicia is a point on the grid.

5. The method as defined in claim 2 wherein the step of determining a position-specific image of the pattern for each position in the plurality of different positions, comprises imaging the breast support plate at each different position using the optical measuring device to provide the position-specific image of the pattern.

6. A mammography apparatus for imaging breasts, the apparatus comprising

a breast compression plate for compressing a breast to be imaged, the breast compression plate having a vertical adjustment means for adjusting the height of the breast compression plate to a selected height, and an optically-readable pattern;

a breast imaging means for imaging the breast compressed by the compression plate;

an optical measurement means for generating an image of the optically-readable pattern; and,

calculating means for determining a deflection of the breast compression plate from the selected height from the image of the optically readable pattern.

7. The mammography machine as defined in claim 5 wherein

the pattern has a plurality of local pattern indicia;

the image has a plurality of local image indicia including an associated local image indicia for each local pattern indicia in the plurality of local pattern indicia; and

for each local pattern indicia in the plurality of local pattern indicia, the data processing means is operable to determine an associated local deflection of the breast compression plate from the associated local image indicia.

8. The method as defined in claim 6 wherein the pattern is a two-dimensional radio-lucent pattern.

9. The method as defined in claim 6 wherein the pattern is a grid, and each local pattern indicia is a point on the grid.